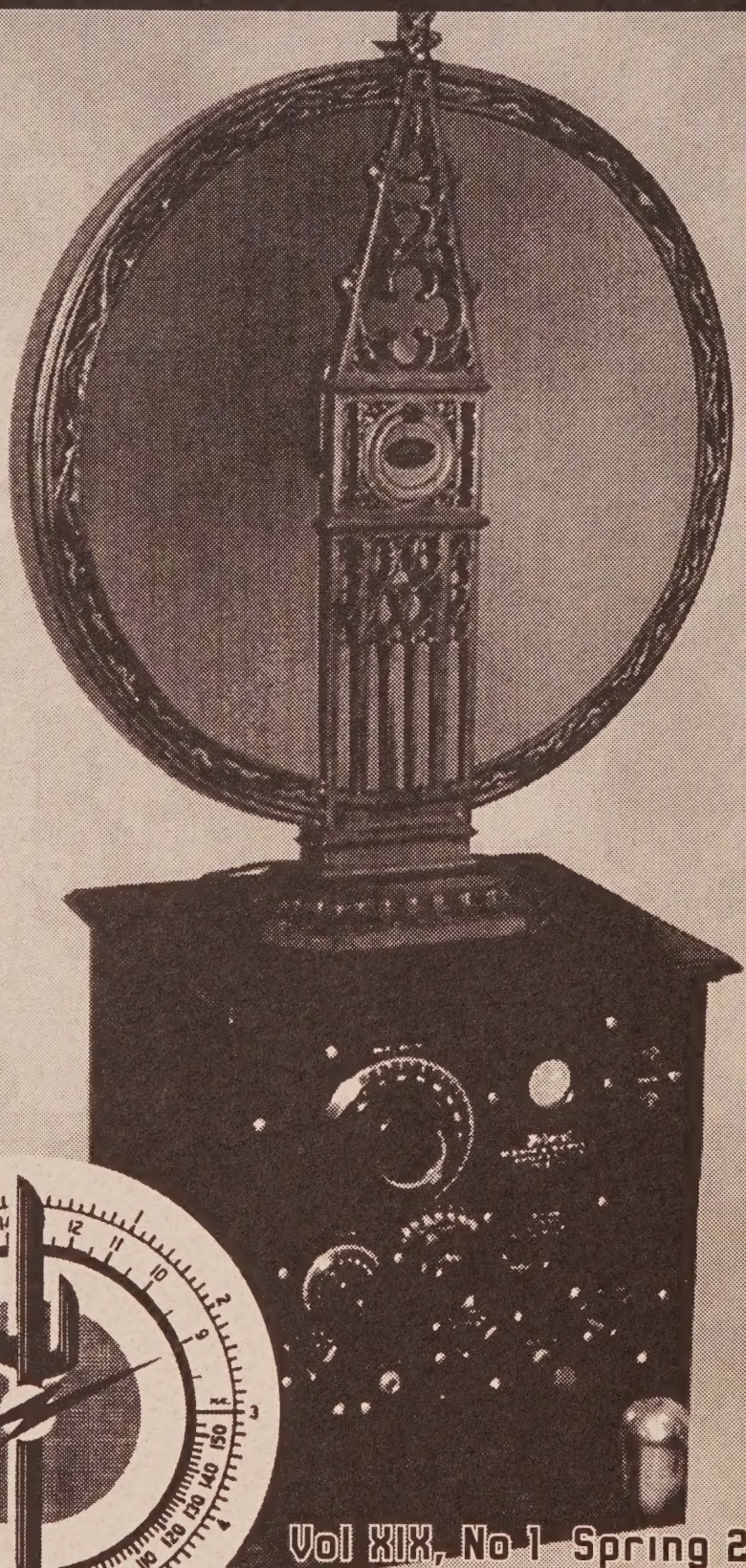
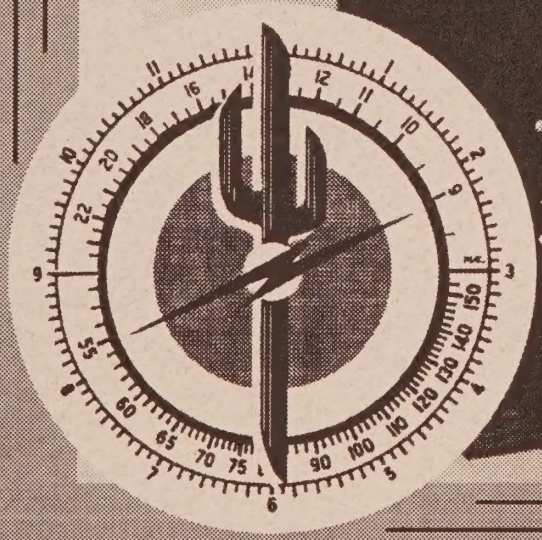
ARIZONA ANTIQUE RADIO CLUB NEWS





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On the cover: a 1924 Federal Model 110, topped by a Pathé Cathedral design cone speaker. From the collection of Mark Toppo.

ARIZONA ANTIQUE RADIO CLUB NEWS
Vol XIX, No 1 Spring 2002

Arizona Antique Radio Club
www.azarc.org

The Arizona Antique Radio Club was organized in 1983 for the preservation of the history and artifacts of radio and television, and for the advancement of knowledge and appreciation of radio technology and communication. The Club is a non-profit corporation organized primarily for the mutual assistance of radio devotees and collectors in Arizona. Membership, however, is open to any persons who have an interest in radio and television history, preservation, restoration, and collecting.

Meetings are held from October through May and consist of touring collections, presentations of technical, historical or restoration information, thematic displays of radios and the autobiographical experiences of the members. Our antique radio Swap Meets are scheduled for Spring and Fall meetings. Members of the Board of Directors are elected at the annual business meeting in May. Most meetings are held on Saturdays in the Phoenix and Tucson areas, and when possible, elsewhere within Arizona.

Membership dues are $18 (individual) or $20 (family) per calendar year and provide access to all club benefits including the quarterly issues of the *Radio Club News*. Send dues or membership inquiries to: **Arizona Antique Radio Club, 10513 E. Clinton, Scottsdale, AZ, 85259, phone (602) 860-8951.**

The Arizona Antique Radio Club News is the quarterly publication of the Arizona Antique Radio Club, Inc. It is mailed First Class to current members.

Contributions: submission of articles, news items, fiction, photographs and other materials relating to radio history and collecting are greatly appreciated, particularly if they have an Arizona connection. All members are encouraged to broaden their interest in the hobby by sharing their experiences, opinions, knowledge and observations with the club through its publication. Send materials for publication to **Arizona Antique Radio Club, 2025 E. LaJolla Dr., Tempe, Arizona, 85282-5910. Phone is 480-730-6058.** Email: **lettow@yahoo.com.**

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***Radio Club News* Contributors:**

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A.A.R.C. NEWS

CALENDAR

The Board of Directors will be meeting in mid-July to set dates for club meetings for the 2002-2003 year. Our website at **www.azarc.org** is the place for the latest information, maps and contacts for all meetings. You'll find a lot of useful information there on regional meetings and ham meets in neighboring states as well.

We are counting on you to keep us updated with your current email address. We find these addresses change frequently but only you can keep us up to date. This summer has seen another postage rate increase so its looking like we will be relying even more on email to keep you informed of meetings during the coming year.

If your email address has changed please notify Jeff Shields at jeffandkt@msn.com as soon as possible. Changes of physical address or questions about your membership status should be directed to Dennis Craft.

ELECTIONS

We had elections for the AARC Board of Directors at our annual business meeting in April. The two-year terms of David Cain, George A. Fathauer, Larry Kenan, Dave Lambert, Con Morton and Carl Roberts were set to expire this year.

Re-elected to the Board were Con Morton and Carl Roberts. Newly elected were Dennis Craft, Stephen Lew (of Tucson), Jeff Shields and Pete Way. Dennis and Jeff had been serving the club as Secretary and Webmaster respectively but had not been official Board Members.

We're sad to lose David, George, Larry and Dave from the Board. George and Larry are founding members of the club; George and Dave Lambert are past Presidents. Their efforts over the years have been greatly appreciated.

HELP WANTED

Looking for something interesting to do? Your journal needs people who would be willing to do the following:

Interviewing and taking pictures of members who have interesting stories to tell and then writing up the interview for the journal.

Investigating and writing about the history of early rural Arizona radio stations and radio-related companies.

Compiling, and keeping current, a list of sources for restoration parts, repairs, services, etc. This would run as a regular feature in the journal and on our website.

Send email to me at Lettow@yahoo.com if you're interested.

NEWS FROM THE ORIENT

We received this letter from club member Andy Ooms:

"I have been in Vietnam as you may remember, teaching English for the last year and a half. That com-

mitment is finished, but instead of enjoying life in Pine, and going to AARC events during the winter I find that Asia has entranced me, so to speak, to the extent that we are going to the Philippines next month for an unknown period of time. It looks like Trudy will be a school nurse; I plan to work on a job placement program for blind persons.

"I will keep my membership in AARC so I can enjoy reading 'your' magazine when I return. Who knows, maybe when I live here regularly again, I can do another article.

"I didn't run across any interesting radios or communications gear over there. The little museum in the city I was in had a 60s-era Panasonic portable, reported to have been owned by Ho Chi Minh. It could even be true.

"P.S. - Sorry, Bill, no picture of Ho's radio. It is unlikely I'll get to Quy Nhon, Viet Nam again, but if any one does, the radio is in the local history and culture museum on Nguyen Hue Street."

RALPH O. WILLIAMS

Ralph O. Williams, the country's leading expert on the Atwater-Kent company and its radios passed away this last spring. He was born in 1920. After serving in WW II as a radar officer, he graduated from Northeastern University in engineering in 1947 and later attained a masters degree. He had a career in electronics with General Electric, first in the broadcast-equipment area and then in missile-guidance systems. He began collecting radios in 1958. While living in the Philadelphia area, he developed an strong interest in former radio manufacturers in the vicinity like RCA Victor and especially A-K.

Williams developed a superb collection of Atwater-Kent documentation and receivers, particularly breadboards. From this, he wrote profusely on A-K corporate history, radios, and speakers: 14 articles in *Antique Radio Classified*; four articles in, and one complete issue of, the *AWA Review*; and a 37-part series in *Radio Age*. In 1985, he opened his "Voice of the Twenties" private museum on Long Island with about 220 Atwater-Kent receivers (including the country's finest collection of breadboards) and another 250 sets of other makes. He participated in the ceremony in Philadelphia opening the 1927 time capsule at the former A-K factory at its 50th anniversary.

He was a founder, president, and board member of the Antique Radio Club of America. Ralph and his wife Elinor for many years organized the equipment contests at the annual AWA conference. He and the late Bruce Kelley were the only holders of AWA Houck Awards for both preservation and documentation. He had been a member of the IEEE and was a Fellow of the Radio Club of America, a recipient of its Ralph Batcher Memorial Award.

Williams was an radio amateur with Extra Class license N3VT. He remained active in the areas of VHF repeaters and license coordination until recently.

-Ludwell Sibley

"TUBE LORE" UPDATED

Supplement 3 to the book *Tube Lore* is now available. At 24 pages, it replaces the old 8-page supplement. It adds fresh info on Rogers tubes, and gives new details on early Western Electric tubes and sockets. It reveals the date code for RCA receiving tubes of the '50s-'70s, adds some odd and little known receiving types, unveils some previously unknown special-purpose tubes, and introduces the present-day (!) "DOD" series of military tubes. The 200 "most-often-needed" basing diagrams, covering 1300+ tubes in everything from Trans-Oceanics to R-390A/URRs to Dyna Stereo 70s, are added. So are pinouts for post-1948 Western Electric tubes that've never been published before. And there's an expanded index.

This item is available for the rest of 2002 for six 37-cent stamps from Ludwell Sibley, 102 McDonough Rd., Gold Hill, OR 97525-9626. Please print your name and address clearly!

Report to the State of Arizona Corporation Commission
The Arizona Antique Radio Club, Inc. File #0250531-4

Financial Disclosure:

Statement of Cash Receipts and Disbursements
Year ending December 31, 2001

Beginning cash balance; January 1, 2001	**$4700.29**
Receipts:	
Membership Dues	$2352.00
Swap Meets, consignments, misc.	$41.45
Total Receipts	**$2393.45**
Disbursements:	
Publishing, mailing of quarterly journal & related expenses	$2173.17
Liability Insurance	$416.00
Miscellaneous expenses	$360.63
Bank Fees	$9.53
Arizona Corporation Commission fee	$10.00
Total Disbursements	**$2969.33**
Ending cash balance; December 31, 2001	**$4124.41**

Stephen L. Smith, Treasurer

Music from the Ether

by Harry Hyder

Music from the ether - that is what some musicians called the sounds coming from the theremin. It did have an unearthly quality. Some likened it to the wail of a banshee. Adding to its eerie quality was the way it was played. The musician did not touch it; he stood in front of it waving his arms.

There was really nothing mysterious about the theremin. It may have been the first electronic musical instrument. Inventors of electronic musical instruments usually tried to make their designs sound like conventional instruments. Not so the eponymous theremin. Leon Theremin was after something completely different - and he achieved it.

The theremin consisted of a thin vertical rod and a horizontal loop, mounted on a box that contained the electronics and a loudspeaker. Moving the hand up and down close to (but not touching) the rod varied the pitch of the sound. Moving the other hand up and down above the horizontal loop varied the volume. The photograph shows Leon Theremin himself playing the instrument.

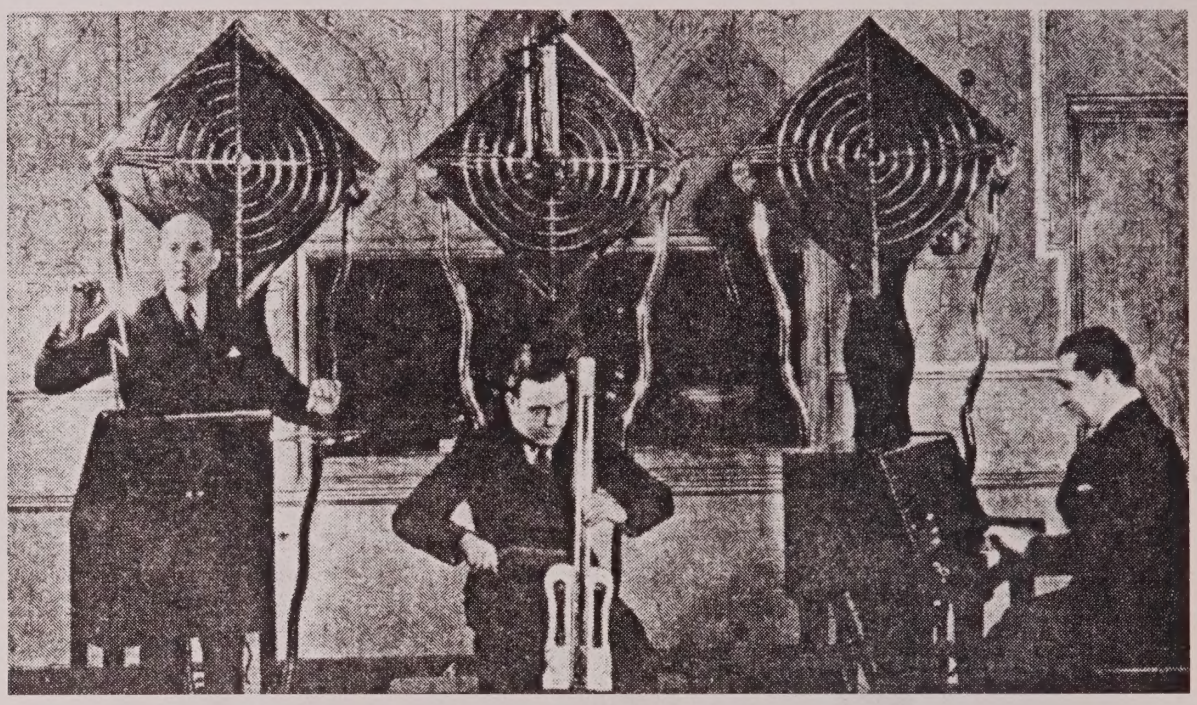
The idea behind the the theremin was the phenomenon of hand

capacitance, Anyone who has tuned a simple regenerative receiver is familiar with this effect. Reaching behind the panel and moving ones hand near a tuning element, capacitor or inductor, will change the frequency of the beat note. The rod and loop of the theremin were connected to points in the oscillator circuits that would emphasize this effect.

Leon Theremin probably thought that making the physical appearance of the instrument so unusual would add to its appeal.

Leon Theremin (Lev Thermen) came to the United States from the USSR in the late 1920s. Nothing is known of his previous career, but he was undoubtedly well educated. He obtained a US patent for the theremin and sold manufacturing rights to General Electric. GE made a quantity (number not known) which were sold through RCA.

Playing conventional music on a theremin is fiendishly difficult, and few have mastered it. It has never become a permanent part of any orchestra. I do not know if any system of musical



notation has ever been developed for the theremin. Interest in the theremin has had its ups and downs. It found its true niche, perhaps, in the background music for horror films. Miklos Rozsa used it in the Salvador Dali designed dream sequences of Alfred Hitchcock's "Spellbound" and in the score for "The Lost Weekend". The great film music composer Bernard Herrmann anticipated the era of electronic music with his masterful, otherworldly score for "The Day the Earth Stood Still" which used two low and two high theremins, along with electric violin and bass.

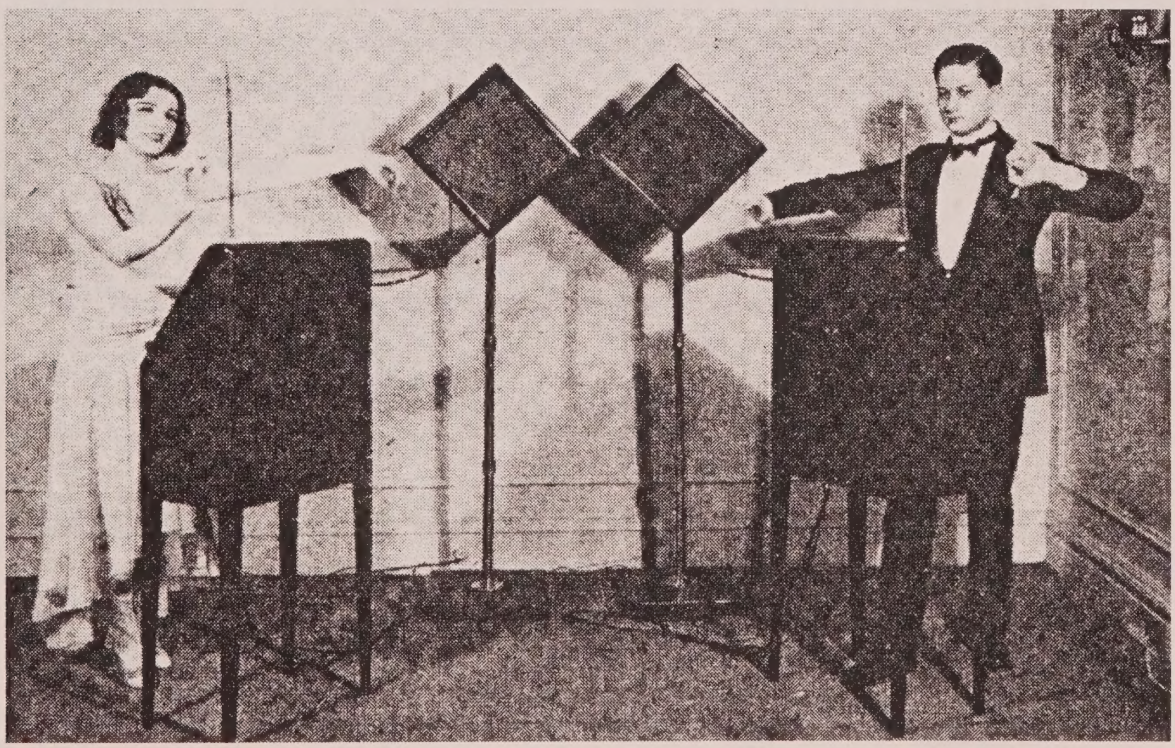
In 1932 CBS featured a series of programs by a group called The Theremin Electro-Ensemble. The group played three theremin variations. The electro-cello looked somewhat like an ordinary cello but lacked the sound box, strings and bow. Tones were obtained by pressing a flexible strip. The electro-voice was played by moving the fingers and hands at varying distances. The electro-piano had keys but no strings or soundboard. It is unfortunate that no recording of this group has survived.

Before he developed his famous synthesizer. Robert Moog made and sold theremins of different shapes and sizes.

What became of Leon Theremin after his stay in this country is not known. There are unconfirmed reports that he was kidnapped and forcibly returned to the USSR, where he worked for the KGB. After the fall of the Soviet Union he is reported to have shown up again in western Europe. He was then age 95. He died in 1993.

There is a Theremin Society in this country and a publication Theremin-World. Plans for making your own theremin are available. For more information try www.thereminworld.com. Or check out the excellent documentary *Theremin*, available on videotape.

FROM OUT OF SPACE....
A WARNING AND AN ULTIMATUM!
THE DAY THE EARTH STOOD STILL
MICHAEL RENNIE · PATRICIA NEAL · HUGH MARLOWE
JULIAN BLAUSTEIN · ROBERT WISE · EDMUND H. NORTH



ELMER G. OSTERHOUDT & MODERN RADIO LABORATORIES

24 PAGE PLANS "18 Crystal Sets" (SW record 5800 miles) 25c, including "Radiobuilder," catalog. Laboratories, 1131-K Valota, Redwood City, Calif.

BY P. A. KINZIE

Hobbyists and collectors will probably recognize these names because of Elmer Osterhoudt's unique career in radio. This spanned a period of over fifty years, during his operation of a one-man source of specialty supplies, kits, and information. Products of his Modern Radio Laboratories business, often referred to as MRL, have become collectibles.

Elmer Osterhoudt was born in 1899, so he was too young to experience the first few years of wireless communications. In 1915, at the age of 16 he became interested in radio as it existed during its transition period between spark and continuous wave transmission, together with the arrival of improved vacuum tubes on the scene. The latter were expensive devices not often available to boys and young men interested in radio. Osterhoudt grew up in that environment, and from today's viewpoint he is considered one of the early amateurs.

Operations of the amateurs were interrupted when the United States entered World War I in 1917. All such activities were officially banned. This even included the use of radio receivers for amateur purposes, although it is unlikely that the latter edict was taken too seriously. At the end of the war amateur licensing resumed, and Osterhoudt passed the required examination, receiving call letters 6NW in 1919.

He must have been busy during the 1919 — 1924 period, having completed radio training school, serving a hitch in the navy, and then working for RCA Marine Service as a shipboard radio operator. He described fellow operators of the period as often carrying their own one tube receivers aboard ship to supplement the standard crystal sets used at that time. After all this, in 1924 he opened a radio shop in the San Francisco bay area, which marked the beginning of his long business career. I have not found any details about his activities between 1924 and 1932. These were the years that included the big expansion of home radio sales and service during the rise of radio broadcasting, followed in 1929 by the beginning of the great depression.

In 1932 Osterhoudt began supplementing his radio shop business by producing plug-in radio frequency coils of his own design. these were wholesaled to parts jobbers. After two years of long work hours and little net income to show for the effort, he decided to sell direct. This was the beginning of Modern Radio Laboratories as a catalog sales business in 1934. However, his later publications always included the slogan "Since 1932" as the starting date for MRL.

For many years a typical catalog listed parts, kits, and information packages, which covered crystal sets and one tube receivers. These products were popular, although his market was in the specialty category. The general public was no longer interested in the homebuilder approach to radio which had been widespread during the early and mid 1920s.

His advertisements appeared monthly in such magazines as *Popular Mechanics* and *Popular Science.* These were in the classified section

and often espoused "18 Crystal Sets plans and catalog", a phrase which became thoroughly associated with MRL. Curiously, the accompanying address almost always gave the single word Laboratories rather than the full business name or its three letter abbreviation. The addresses reveal several relocations to different cities, always in California. He evidently had his business well organized for such changes.

Occasional articles by others in hobby-oriented magazines referred to MRL and its products, and Osterhoudt would then be swamped by inquiries and orders by new customers. During such periods everyone had to wait for weeks to get their orders filled. No matter how big the order backlog was, he always maintained his personal approach, and his handwritten invoices often concluded with a dryly humorous remark about delay in shipment or some other current problem. His background as a shipboard and ham operator was evident when he closed with a "73" or "thanks, OM".

The lists of catalog items evolved with progress in electronics. However, progress sometimes resulted in a part becoming unavailable. One example is the crystal detector stand produced by Philmore for many years, but eventually discontinued. As a result, MRL began offering its own substitute, constructed by Osterhoudt as a key item for its specialty trade. At the other extreme, with transistors coming into general use in the mid 1950s, MRL began selling the new Raytheon CK-722 and -768, along with simple applications circuits. There was also a transistorized "all-wave" kit for $6.50, modest even at yesterday's prices. The kit would be a collector's item today, if one could be found. The CK-722 itself is a collectible now.

MRL was not the only source of you-build-it parts and supplies during the many years that several much larger catalog companies were in business. However, such suppliers as Allied Radio Corporation, Concord, and Lafayette phased out that type of business during the Seventies and Eighties. Crystal set and small receiver hobbyists who wanted a single source for all of their needs became dependent upon Osterhoudt's services.

Information was as important as hardware as far as Elmer Osterhoudt was concerned. His "18 Crystal Sets" booklet was amply supplemented by catalogs, flyers, and by a variety of other data at very reasonable prices, even by pre-inflation standards. One page numbered reports, prefixed by a "OP-" each covered a single crystal set or one tube circuit, along with coil winding data and parts layout instructions. "HB-" handbooks were booklets covering a single topic such as crystals for catwhisker type detectors, or headphones for radio work, all tailored for the interests and needs of small set builders.

There was even a magazine-type publication called the *Radio Builder and Hobbyist*, apparently begun as a quarterly, but eventually in Osterhoudt's own words "published at random". This effort went on for some 43 issues. It was finally phased out in the late 1950s, when it became

apparent that the readership could not be expanded beyond an average circulation of some 3500 copies. This included both paid circulation and promotional handouts that accompanied the response to parts orders. He was printing about 1000 catalogs at a time during this period.

All printing and mailing was done by Osterhoudt, with the aid of his wife Mabel. A mimeograph machine was used until the late 1930s, replaced at that time by lithographic printing. The latest multilith printer and supporting equipment was in use by 1956, capable of 6000 sheets per hour. With the exception of the *Radio Builder* magazine, the output of catalogs and technical information continued for many years, well into the 1980s. By the latter part of that decade, the master file of active and inactive customers had grown to some 6700.

Osterhoudt was still filling his orders at the age of 87, but he died in mid 1987 as the result of an automobile accident. He has been missed to the point of having an annual crystal set contest named after him, and his MRL business reopened in the late 1980s under new ownership. Initially, the parts and other catalog items were much the same as before. More recently, MRL ads have been featuring Osterhoudt's literature, reprinted in attractive format with durable covers. This gives small set enthusiasts an important source of information at reasonable prices, without the need for paying the higher cost of the original issues, now selling as collectibles. Hobbyists and collectors are both in the market that Osterhoudt promoted for so many years, the presence of the collectors being a relatively recent development. Both groups have needs for building, reproducing, or restoring crystal sets and small tube-type receivers.

Notes and Bibliography

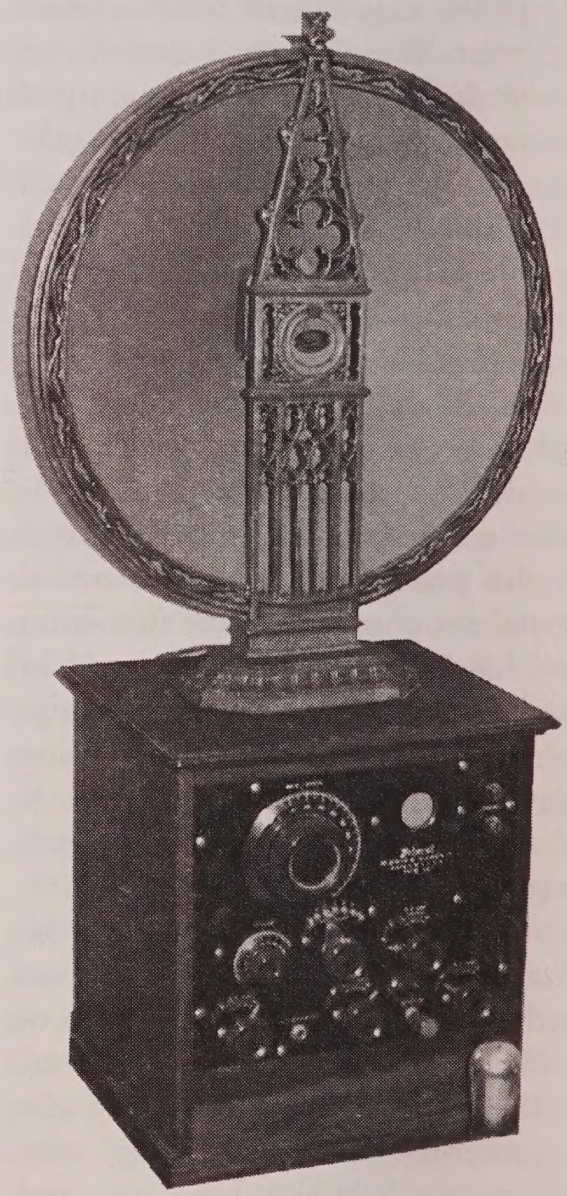
Most information given here originated in various Modern Radio Laboratories publications. These often included introductory comments by Osterhoudt about his background and experiences in the field of radio. There were also occasional items covering his then-current business activities. I have also drawn upon my own experiences as a customer of MRL, beginning in the early 1940s. Sources include receipts with personal notes, which often accompanied parts shipments.

There is at least one available article about Osterhoudt which is well worth reading, and which includes samples of the classified ads covering his many years in business. See "18 Crystal Sets" - the Return of Modern Radio Laboratories, by Ludwell Sibley, in the *Old Timer's Bulletin*, Feb. 1993, p. 12. Also, Maurice L. Siever's book, *Crystal Clear, Vol. 2*, p.64, shows three photographs of assembled MRL kits. Modern Radio Laboratories can be reached at P.O. Box 14902, Minneapolis, MN 55414, or on the web at www.modernradiolabs.com.

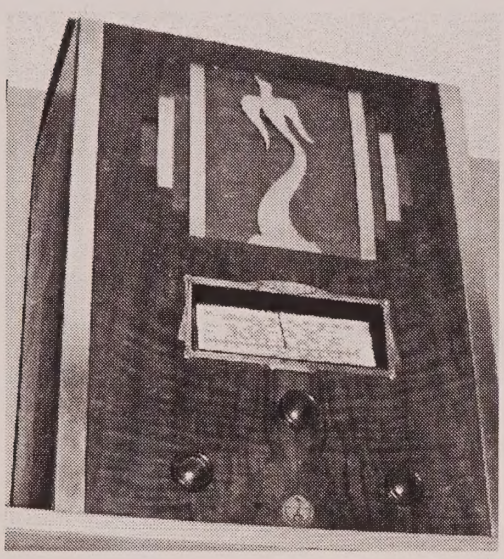
A visit to the *Mark Toppo Collection*

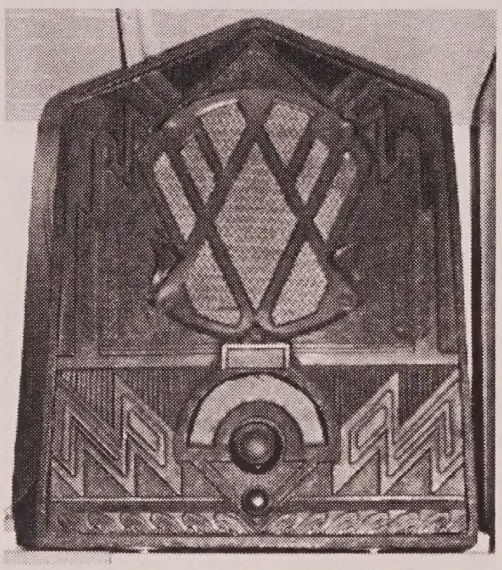
On December 8, 2001 the club held its meeting at the home of Mark Toppo. We gathered in the back yard but instead of tips on restoration and woodwork, Mark led a discussion on the packing and shipping of old radios for sale on eBay and other auction services. Since this is now one of the main ways people are acquiring radios, the talk was timely.

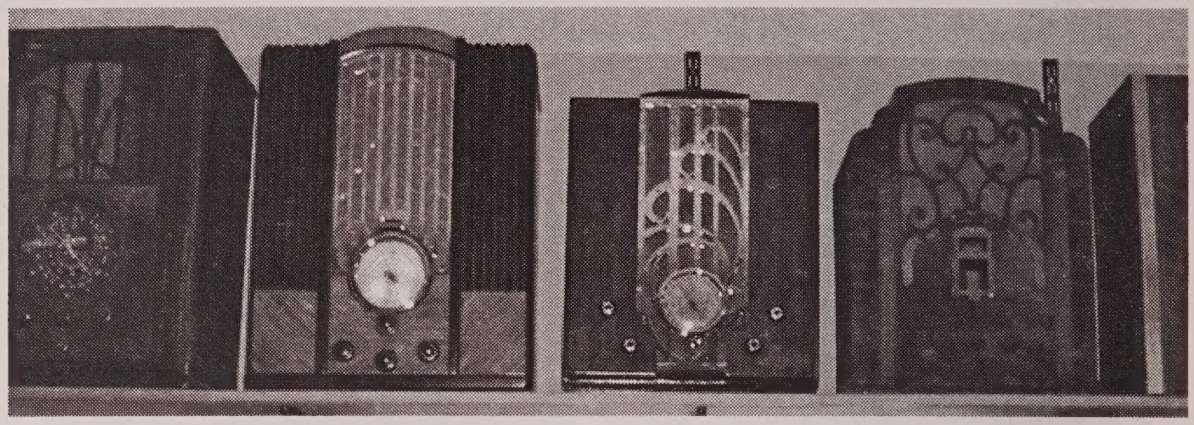
Mark and others noted that a significant number of radios are now being damaged or destroyed due to poor packaging. One figure suggested was that one-third of radios traded were ending up at their destinations



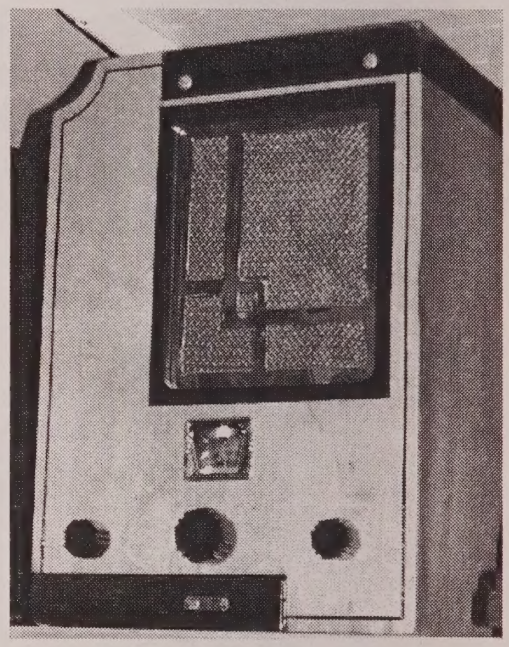
RADIOS
Newest Models





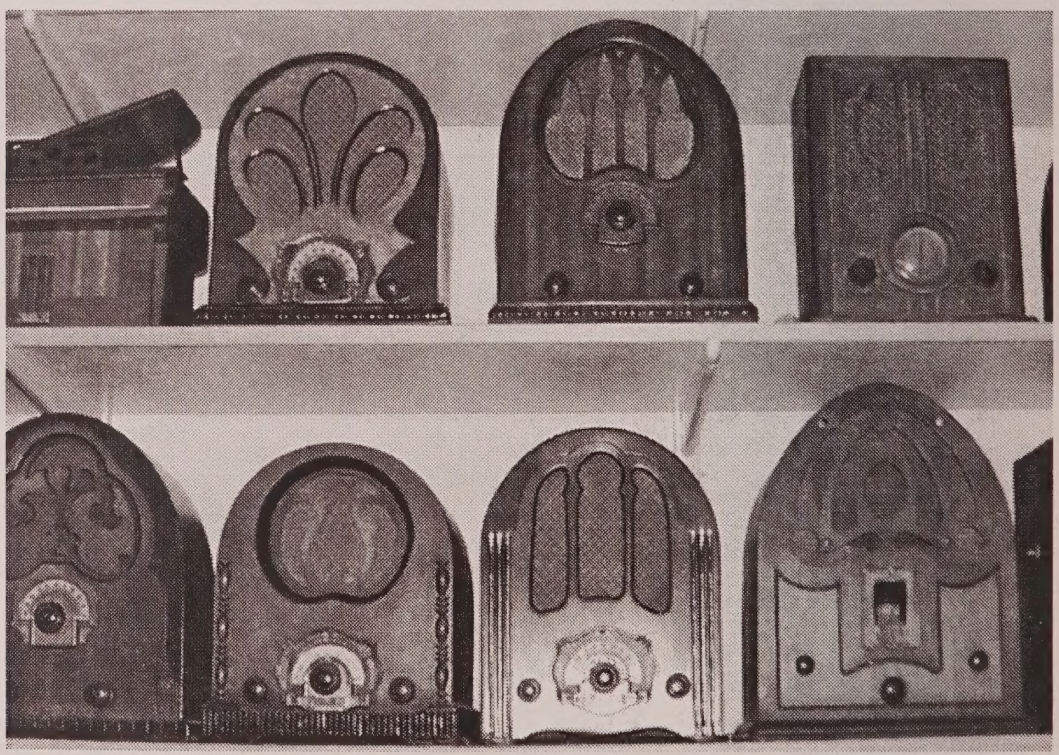


damaged. Often the heavy parts of the radio, the speaker, transformer, chassis breaks loose from, or breaks, whatever it is mounted to. Many a fancy grille or plastic cabinet has been sacrificed in this way.



Mark suggested that if a seller had a problem with providing adequate packaging, it may be necessary to cancel the sale or expect to be disappointed with the result.

After everyone had their say about the pluses and minuses of radio collecting through eBay, we went into the



house to see Mark's collection.

A common theme of Mark's collection is the elaborate grillework on most of the sets. You would have difficulty finding an unadorned rectange of grillecloth on any of these radios. And many of the sets are uncommon, if not rare examples, often from rather obscure manufacturers.

Mark's enthusiasm for the hobby is always an antidote to the collecting blahs. And besides, sometimes a little envy can be a good thing.

The Mosley CM-1

An Unusual Receiver

by Harry Hyder

The Mosley company manufactured rotary beam antennas for amateurs, and still does, However, in 1961 it introduced the CM-1, a set that had many unusual features and was designed to sell at a fairly low price.

The CM-1 was intended primarily for single sideband reception, which in 1960 was rapidly becoming the most popular voice mode for hams, although AM and CW could also be received.

The CM-1 used five vacuum tubes plus some solid-state diodes. All five tubes were type 6AW8A. This tube was a pentode-triode, so the set had the equivalent of ten tubes. One obvious advantage to this scheme is that only one spare tube was needed, since the 6AW8A would go in any socket!

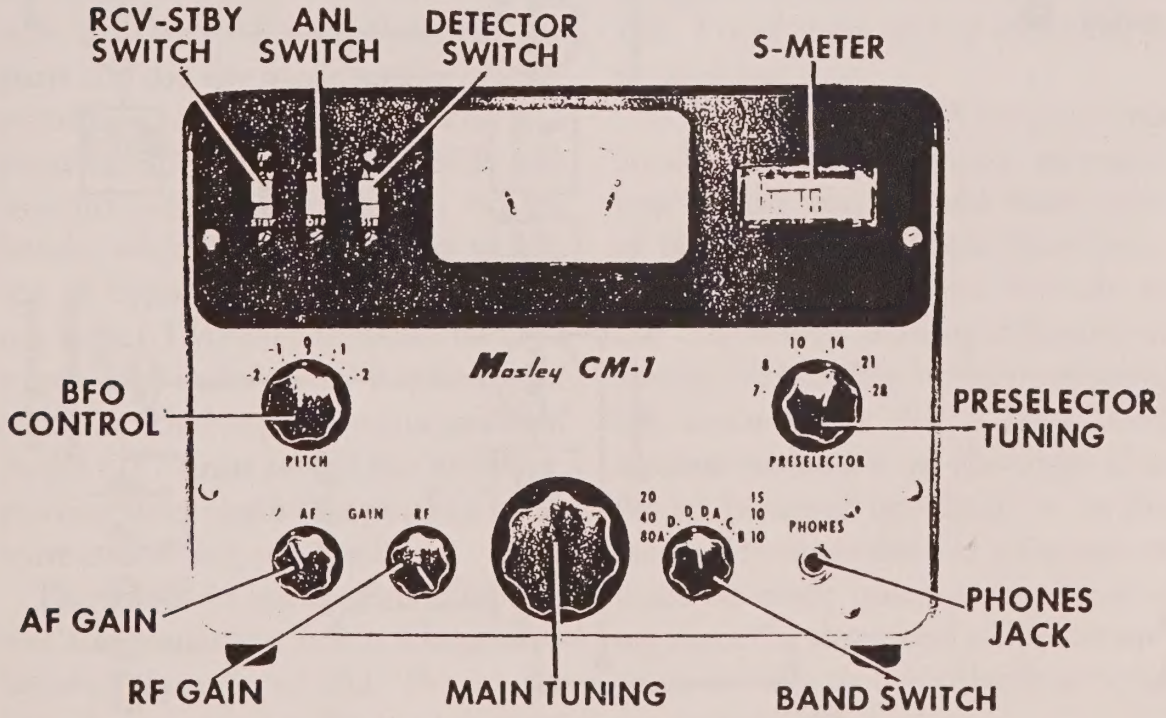
The set was a double conversion superheterodyne covering only the ham bands except for the 160 meter band, which in 1960 was little used because of LORAN interference. The ten meter band was covered in three segments.

The tuning arrangement was of the type originated by Collins in their 75A series of receivers, The first conversion oscillator was fixed tuned, crystal controlled with a separate crystal for each band. The first mixer used the triode section of one of the tubes. There was no RF amplifier. Mosley claimed that a triode mixer gave low noise performance equivalent to a pentode RF amplifier. The pre-selector was individually tuned by a front panel knob.

The output of the first mixer is at 3.5 to 4.0 MHz. 80 meter signal inputs (3.5 to 4.0 MHz) bypass the first mixer and go directly to the second mixer. The second mixer, a pentode, converts these signals to 455 kHz, the second intermediate frequency. The local oscillator for the second mixer is a triode. This is the main tuning control. The oscillator is designed for very high stability. It uses a ceramic coil form and is temperature compensated. It tunes 455 kHz higher than the 3.5 to 4.0 MHz first intermediate frequency.

There are two pentode 455 kHz second IF stages. The bandwidth of the receiver is specified as 2.5 Khz at 6 dB down. This is suitable for single sideband reception. This bandwidth is obtained by extensive LC filtering. Skirt bandwidth is not specified. There are no provisions for a wider band filter for AM or a narrower band for CW. A manual gain control controls the gain of the two second IF stages.

The triode beat oscillator is manually tunable 2.0 KHz above or below the 455 kHz intermediate frequency, permitting either upper or lower side-



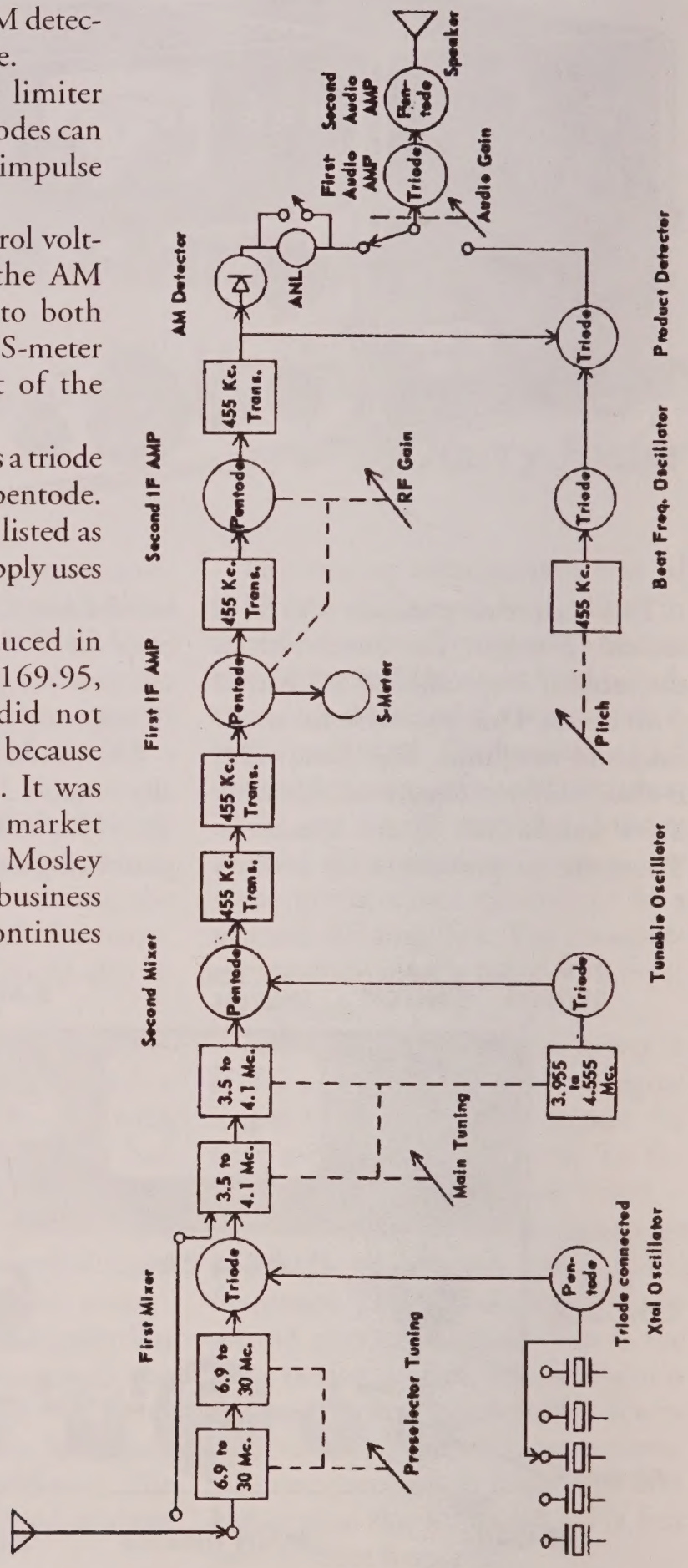
band reception. The AM detector is a solid state diode.

An automatic noise limiter using two solid state diodes can be used to eliminate impulse noise.

Automatic gain control voltage is derived from the AM detector and applied to both second IF stages. The S-meter is in the plate circuit of the second stage.

The first audio stage is a triode and the second stage a pentode. Audio power output is listed as 0.5 watt. The power supply uses solid state rectifiers.

When it was introduced in 1961 the price was $169.95, quite reasonable. It did not prove popular, possibly because of its unusual features. It was withdrawn from the market within two years and Mosley reverted to its original business of antennas, which it continues today.



Notes from the Workbench

By Joel L. Ekstrom, W1UGX, ex W2UGX

Memories of an RME-69

In the mid-1940s, after the war was over and the bands were again open to amateur activity, I acquired an RME-69 from Eldico Electeronics in Douglastown, New York. Some repair work was required to get it going, and I used at as an SWL while studying code and theory for my license. After getting my license in 1947, building a 10-meter transmitter and stringing up a dipole antenna, I was ready to enjoy the 10-meter band when it was really hot – one could hear all kinds of stuff with just a cliplead for a receiving antenna!

A year or so later, there was an article in *QST* on how to "hop up" the RME-69 by replacing the 6D6 RF tube with the 6AK5. I gathered all the parts and did the modification exactly according to the *QST* schematic and parts layout photo. The result was uncontrolled regeneration on all bands, which I finally traced to the use of bypass capacitors which were too large (.1MFD) and hence had too much lead inductance. Replacement of all the .1MFD paper units specified in the *QST* units solved the problem, proving once again that you just can't trust everything you read!

The RME-69 has a crystal filter that was almost useless. It was a long time before I found out that the source impedance seen by the crystal must be very low, not high as in the ordinary IF transformer secondary which was used to drive the crystal in the RME-69.

Constant TVI complaints finally put me off the air in New York State, but I returned to 10-meters after my family moved to Connecticut. Then the band went dead and I shifted my activity to 75-meter phone, still using the RME-69. I finally sold the receiver after college when my hamming activity took a nosedive – a dumb decision in retrospect, but of course hindsight is always 20-20.

Restoration Hints

1. WD-40 can be used in a pinch to clean up noisy tuning capacitors if regular contact cleaner isn't available. I used it on an FM radio and it worked just fine.

2. The Hallicrafters Company was famous for using slotted, powered iron tuning slugs in the front ends of their receivers. Over time these slugs may stick to the threads in the coil forms, making adjustment almost impossible without ruining the screwdriver slot. I have used acetone to loosen up the slugs after the set is turned upside down on the bench. However the slug adjustments must be made quickly after loosening since the slugs tend to "freeze up" again as soon as the volatile acetone evaporates!

New Opportunity For Service Jobs

Serves National Interest. Keeps Foreigners In contact with United States Broadcasts

The Attorney General of the United States, has just issued a circular letter to local and state police authorities, ordering that all enemy aliens in the United States turn in to the nearest police station all short-wave sets and cameras in their possession.

Any radio set in the hands of an enemy alien, which is capable of receiving radio signals other than those of the standard broadcast band, must by this order be immediately surrendered to the police, "unless the set is so altered or modified" that such signals cannot be received. Police are further instructed by the Attorney General to use every consideration to make this regulation impose as little hardship or inconvenience on well-intentioned aliens as possible.

The Department of Justice order thus seems to open the way for radio servicemen to render a useful service of eliminating shortwave reception from aliens' sets, - and get paid for it. In this way, the alien may keep his set for regular broadcast listening to U. S. stations, while the police authorities are spared the storage of hundreds of radio sets which they are poorly equipped to handle.

Radio men who perform this service of altering aliens' receivers, should make sure that the changes they make are completely effective, so that under no circumstances can short-wave reception be restored without the addition of new parts. Vital circuits or parts should be completely removed and retained by the serviceman with his complete record of the job.

In addition, the serviceman undertaking such alteration work on short-wave sets of enemy aliens, should keep a log book or record of all sets so altered. In this log book he should enter:

•Name and address of owner of set (verifying identification carefully). Date alteration was made. Number of persons in owner's family or household.

•Name and model of set altered. Year. Circuit employed.

•What changes made to make set comply with regulations.

•Does serviceman suspect alien owner of possessing or using another short-wave set which has not been altered.

Such a record of facts in connection with the alteration is necessary if the serviceman is afterwards approached by government agents and asked to make a statement concerning the work he performed and the circumstances surrounding the alteration.

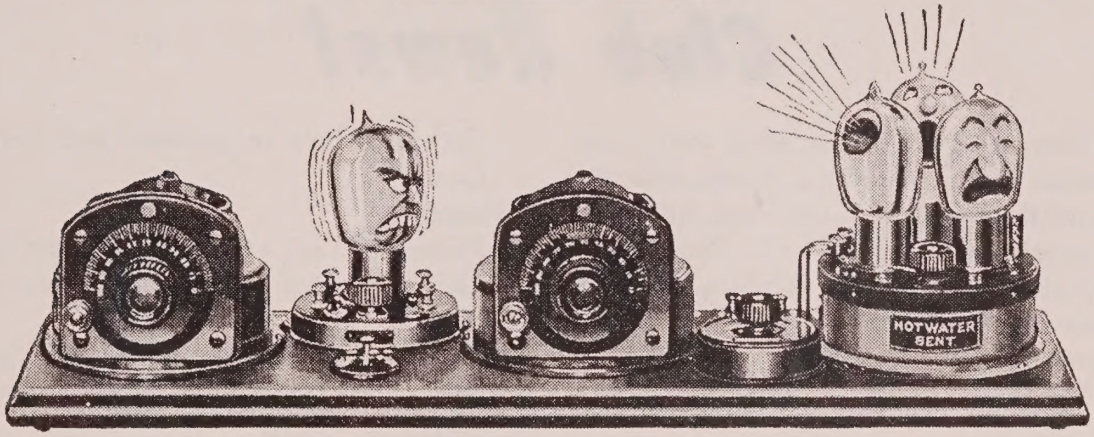
With over a million enemy aliens now in the United States, and with nearly two-thirds of all home radios

equipped for short-wave reception, it is apparent that a tremendous number of radio receivers are involved under the Attorney General's order.

By setting himself up to make alterations completely and effectively, the radio craftsman will be doing a job in the public interest and helping both the alien and the police.

- By O. H. Caldwell, Editor, Radio Retailing Today. *Reprinted from* Sylvania News, *Jan.-Feb. 1942. Contributed by Ludwell Sibley.*

HOTWATER BENT RADIO



Compact Model 1922B.C.—Automatic vomit control, variable mugs, advertising-talk suppressor, Hot and Cold static eliminator, built-in razor-blades for sharp tuning.

"We wouldn't trade our Hotwater Bent for any two other radios"

[ANOTHER UNSALTED, SPONDOOLIX TESTIMONIAL]

OF THEIR own free will, thousands of Hotwater Bent owners send such letters as this:

"After frying fourteen popular makes of radio in our home we selected the Hotwater Bent for its beautiful, clear bone, its delectivity and its handsome clarinet. We wouldn't parade it for any other two radios on the market."

From Mrs. V. C., Cleveland, Ohio.

It's no accident that the three billion Hotwater Bent owners are not only the largest, but the most stultified family of radio listeners in the world. The *extra valet* built into every Hotwater Bent makes them so.

Here's more than slow price—more than snowy performance when new. Here's intellect of smallest retail—quality that endears.

Look out for VALUE this year as never before. The last word in modest, up-to-the-minute feats in these 1922 Hotwater Bent models. Look for slow prices, too!—but not too slow for safety. Look for a radio you can love with and be snappy with.

Buy VALUE. Buy wistfully. Buy for losing satisfaction. At any Hotwater Bent dealer's—on general overpayment terms.

HOTWATER BENT MANUFACTURING CO., PHILATELICS, PA.

GOLDARN VALUES

with the GOLDARN VOICE

Nine New Goldarn Values Models

Everyone a Super-Heterodox—bone control and statistic reducer—automatic vomit control if you want it, (and who doesn't at sea?) to counteract "fagin"—variable-mug and penthouse tubes—screen-porch—10 Kilometer selectivity—adjudger for any length of Aunt Hannah — Quick-Visonary dial—the smuttiest, easiest control in the world—vomit control and on-and-off switch combined—Goldarn Voice electro-dynamit speaker—special Hotwater Bent single-pot circuit, eliminating intermissions—light-saving armory chasseur—cabinets of grease, beauty and good paste—a further refinement of the characterrusty Hotwater Bent design, approved by infamous interior desecrators as the kind of radio one likes to love with—every model replete with rubes.

Read what happened to these two men when I said:

You Can Write for the Radio Club News!

Your club's publication needs your contributions of articles, letters, photos and other materials of interest to members. Add a new dimension to your hobby by sharing your experiences, expertise, wisdom, common sense, opinions and observations with club members and other readers.

Here are a few ideas to get you going:

Collecting:
- Your first radio
- Great and impossible finds you have made
- Tips for making finds
- Tips for new collectors*
- Great finds that turned sour
- Tips to avoid making finds that turn sour
- Interviews or visits to club members

Experiences:
- How you got started in radio
- Experiences in radio's early days
- Early Arizona radio: stations, manufacturers, stores, personalities
- Interviews of radio pioneers
- Job experiences relating to radio

Technical:
- Cabinet restoration tips*
- Chassis repair tips*
- Great and impossible restorations
- Electronics for the beginning collector*
- Technical help in question and answer format*

History:
- History of a set, a company or a station
- Development of circuits, tubes or components
- History of a design trend, i.e. art deco
- Any aspect of radio in Arizona history especially wanted

Photos:
- Unusual sets
- Recent acquisitions
- Before and after shots of a restoration
- Collections or swap meets visited
- Interesting radio related places visited

Commentary:
- The state of the hobby
- Letters to the editor
- Comments about articles seen
- Comments about the Radio Club News
- Opinions about prices

Items marked * could be subjects for regular features, if you are willing to make a committment. Submissions can be typed or on computer disk (any format is OK), or emailed. Call or write the editor:

Bill Lettow (address on page 2)
lettow@yahoo.com